

perforations in the shelter lid, created by larval feeding damage. Later instars built a Group II Type 6, one-cut fold by making a single large cut near the distal portion of the leaf. This cut extended from the leaf margin, directly to the midvein. This side of the cut was then drawn together with the opposite leaf margin creating a large, flattened pocket (Fig. 1f). Heavy feeding damage around the area where the larvae rested often resulted in this portion of the shelter being nearly isolated from the surrounding leaf (Fig. 1g). If the original shelter had not been seen, the final product could easily be mistaken for a Group II, Type 9, two-cut unstemmed fold.

While there has been too little published concerning the details of larval shelter construction to make comparisons between and among taxa, these data provide evidence that the classification system provided by Greeney & Jones (2003) is a useful tool in a variety of geographic regions. We hope this note encourages others to publish similar details so that such architectural features may be used in the development and testing of phylogenetic hypothesis.

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An interspecific mating attempt between a male *Siproeta epaphus* Latreille and a female *Anartia amathea* Linnaeus (Lepidoptera: Nymphalidae).

Interspecific mating attempts between lepidopterans are not uncommon (eg. Davies *et al.* 1997, Deering & Scribner 2002). Here we report an attempted copulation between two nymphalid species, *Siproeta epaphus* (Latreille 1819) and *Anartia amathea* (Linn. 1758) in western Ecuador. Observations were made

at the Sachatamia Lodge (0.01. 35 S 78.45.34 W) near the town of Mindo, Pichincha Province, at 1700 m elevation.

On 6 July 2004, at approximately 11:30 am, a male *S. epaphus* was seen and photographed in copula with a female *A. amathea* (Figure 1). Upon closer examina-



Fig. 1. Male *Siproeta epaphus* in copula with a female *Anartia amathea* at 11:30 am, northwestern Ecuador. Photo by H. F. Greeney.



Fig. 2. Close up of coupling of a male *Siproeta epaphus* and a female *Anartia amathea* in northwestern Ecuador. Inset shows resulting damage to female abdomen. Photo by H. F. Greeney.

tion, it could be seen that, rather than being joined at the genitalia, the male's claspers were attached to the side of the female's abdomen around segment 7 or 8. The exoskeleton of the female was ruptured, and fluids and internal organs were pushing out around the male's claspers (Figure 2). Damage was so severe, it is likely that the female had lost her reproductive capacity, and we doubt sperm transfer was possible. Both individuals were collected and deposited in the Museo Ecuatoriano de Ciencias Naturales in Quito.

The close relationship between *Anartia* and *Siproeta* is well supported (Freitas & Brown 2004, Wahlberg *et al.* 2005), and both genera feed on plants in the family Acanthaceae (DeVries 1987). As plant-derived compounds may be used to derive intraspecific com-

munication pheromones (eg. Conner *et al.* 1981, Schultz *et al.* 1993), similarities in sex attractants may have resulted in the observed mistake.

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